

091615449

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-42.(Canceled)

43.(Currently Amended) A semiconductor device comprising:

a semiconductor layer over a substrate; and

a gate electrode adjacent to said semiconductor layer with a gate insulating film interposed therebetween,

wherein said gate electrode comprises a first conductive layer comprising nitride and a second conductive layer comprising tungsten on said first conductive layer, [[and]]

wherein a ~~lower~~ bottom surface of said first conductive layer is in contact with the gate insulating film, and

wherein said bottom surface of said first conductive layer is larger than a bottom surface of said second conductive layer.

44. (Previously Presented) The semiconductor device according to claim 43, wherein said gate electrode is located over said semiconductor layer.

45. (Previously Presented) The semiconductor device according to claim 43, wherein said gate electrode has an electrical resistivity of $20 \mu\Omega \cdot \text{cm}$ or less.

46. (Previously Presented) The semiconductor device according to claim 43, wherein said semiconductor device is an active matrix type liquid crystal display device.

47. (Previously Presented) The semiconductor device according to claim 43, wherein said semiconductor device is an EL display device.

48. (Previously Presented) The semiconductor device according to claim 43, wherein said semiconductor device is at least one selected from the group consisting of a video camera, a digital camera, a projector, a goggle type display, a car navigation system, a mobile computer, a personal computer, and a portable information terminal.

49. (Currently Amended) A semiconductor device comprising:

a semiconductor layer over a substrate; and

a gate electrode adjacent to said semiconductor layer with a gate insulating film interposed therebetween,

wherein said gate electrode comprises a first conductive layer comprising tungsten nitride and a second conductive layer comprising tungsten on said first conductive layer, [[and]]

wherein a ~~lower~~ bottom surface of said first conductive layer is in contact with the gate insulating film, and

wherein said bottom surface of said first conductive layer is larger than a bottom surface of said second conductive layer.

50. (Previously Presented) The semiconductor device according to claim 49, wherein said gate electrode is located over said semiconductor layer.

51. (Previously Presented) The semiconductor device according to claim 49, wherein said gate electrode has an electrical resistivity of $20\ \mu\Omega\cdot\text{cm}$ or less.

52. (Previously Presented) The semiconductor device according to claim 49, wherein said semiconductor device is an active matrix type liquid crystal display device.

53. (Previously Presented) The semiconductor device according to claim 49, wherein said semiconductor device is an EL display device.

54. (Previously Presented) The semiconductor device according to claim 49, wherein said semiconductor device is at least one selected from the group consisting of a video camera, a digital camera, a projector, a goggle type display, a car navigation system, a mobile computer, a personal computer, and a portable information terminal.

55-78.(Canceled)

79.(Currently Amended) A semiconductor device comprising:

a semiconductor layer over a substrate; and

a gate electrode adjacent to said semiconductor layer with a gate insulating film interposed therebetween,

wherein said gate electrode comprises a first conductive layer comprising nitride and a second conductive layer comprising tungsten on said first conductive layer, wherein a ~~lower~~ bottom surface of said first conductive layer is in contact with the gate insulating film, ~~[[and]]~~ wherein at least said first conductive layer has a tapered cross section, and wherein said bottom surface of said first conductive layer is larger than a bottom surface of said second conductive layer.

80. (Previously Presented) The semiconductor device according to claim 79, wherein said gate electrode is located over said semiconductor layer.

81. (Previously Presented) The semiconductor device according to claim 79, wherein said gate electrode has an electrical resistivity of $20\ \mu\Omega\cdot\text{cm}$ or less.

82. (Previously Presented) The semiconductor device according to claim 79, wherein said semiconductor device is an active matrix type liquid crystal display device.

83. (Previously Presented) The semiconductor device according to claim 79, wherein said semiconductor device is an EL display device.

84. (Previously Presented) The semiconductor device according to claim 79, wherein said semiconductor device is at least one selected from the group consisting of a video camera, a digital camera, a projector, a goggle type display, a car navigation system, a mobile computer, a personal computer, and a portable information terminal.

85.(Currently Amended) A semiconductor device comprising:
a semiconductor layer over a substrate; and
a gate electrode adjacent to said semiconductor layer with a gate insulating film interposed therebetween,
wherein said gate electrode comprises a first conductive layer comprising tungsten nitride and a second conductive layer comprising tungsten on said first conductive layer, wherein a ~~lower~~ bottom surface of said first conductive layer is in contact with the gate insulating film, ~~[[and]]~~ wherein at least said first conductive layer has a tapered cross section, and wherein said bottom surface of said first conductive layer is larger than a bottom surface of said second conductive layer.

86. (Previously Presented) The semiconductor device according to claim 85, wherein said gate electrode is located over said semiconductor layer.

87. (Previously Presented) The semiconductor device according to claim 85, wherein said gate electrode has an electrical resistivity of $20\ \mu\Omega\cdot\text{cm}$ or less.

88. (Previously Presented) The semiconductor device according to claim 85, wherein said semiconductor device is an active matrix type liquid crystal display device.

89. (Previously Presented) The semiconductor device according to claim 85, wherein said semiconductor device is an EL display device.

90. (Previously Presented) The semiconductor device according to claim 85, wherein said semiconductor device is at least one selected from the group consisting of a video camera, a digital camera, a projector, a goggle type display, a car navigation system, a mobile computer, a personal computer, and a portable information terminal.

91.(Currently Amended) A semiconductor device comprising:

a semiconductor layer over a substrate; and

a gate electrode adjacent to said semiconductor layer with a gate insulating film interposed therebetween,

wherein said gate electrode comprises a first conductive layer comprising nitride and a second conductive layer comprising tungsten on said first conductive layer, wherein a ~~lower~~ bottom surface of said first conductive layer is in contact with the gate insulating film, ~~[[and]]~~ wherein said second conductive layer has a thickness ~~between~~ from 200 ~~[[and]]~~ to 400 nm, and wherein said bottom surface of said first conductive layer is larger than a bottom surface of said second conductive layer.

92. (Previously Presented) The semiconductor device according to claim 91, wherein said gate electrode is located over said semiconductor layer.

93. (Previously Presented) The semiconductor device according to claim 91, wherein said gate electrode has an electrical resistivity of 20 $\mu\Omega \cdot \text{cm}$ or less.

94. (Previously Presented) The semiconductor device according to claim 91, wherein said semiconductor device is an active matrix type liquid crystal display device.

95. (Previously Presented) The semiconductor device according to claim 91, wherein said semiconductor device is an EL display device.

96. (Previously Presented) The semiconductor device according to claim 91, wherein said semiconductor device is at least one selected from the group consisting of a video camera, a digital camera, a projector, a goggle type display, a car navigation system, a mobile computer, a personal computer, and a portable information terminal.

97. (Currently Amended) A semiconductor device comprising:
a semiconductor layer over a substrate; and
a gate electrode adjacent to said semiconductor layer with a gate insulating film interposed therebetween,

wherein said gate electrode comprises a first conductive layer comprising tungsten nitride and a second conductive layer comprising tungsten on said first conductive layer, wherein a ~~lower~~ bottom surface of said first conductive layer is in contact with the gate insulating film, ~~[[and]]~~ wherein said second conductive layer has a thickness ~~between~~ from 200 ~~[[and]]~~ to 400 nm, and wherein said bottom surface of said first conductive layer is larger than a bottom surface of said second conductive layer.

98. (Previously Presented) The semiconductor device according to claim 97, wherein said gate electrode is located over said semiconductor layer.

99. (Previously Presented) The semiconductor device according to claim 97, wherein said gate electrode has an electrical resistivity of $20\ \mu\Omega\cdot\text{cm}$ or less.

100. (Previously Presented) The semiconductor device according to claim 97, wherein said semiconductor device is an active matrix type liquid crystal display device.

101. (Previously Presented) The semiconductor device according to claim 97, wherein said semiconductor device is an EL display device.

102. (Previously Presented) The semiconductor device according to claim 97, wherein said semiconductor device is at least one selected from the group consisting of a video camera, a digital camera, a projector, a goggle type display, a car navigation system, a mobile computer, a personal computer, and a portable information terminal.

103.(New) A semiconductor device comprising:
a semiconductor layer over a substrate; and
a gate electrode adjacent to said semiconductor layer with a gate insulating film interposed therebetween,

wherein said gate electrode comprises a first conductive layer comprising nitride and a second conductive layer comprising tungsten on said first conductive layer,

wherein a bottom surface of said first conductive layer is in contact with the gate insulating film,

wherein a side surface of said first conductive layer is aligned with a side surface of said second conductive layer, and

wherein said bottom surface of said first conductive layer is larger than a bottom surface of said second conductive layer.

104.(New) The semiconductor device according to claim 103, wherein said gate electrode is located over said semiconductor layer.

105.(New) The semiconductor device according to claim 103, wherein said gate electrode has an electrical resistivity of $20\ \mu\Omega\cdot\text{cm}$ or less.

106.(New) The semiconductor device according to claim 103, wherein said semiconductor device is an active matrix type liquid crystal display device.

107.(New) The semiconductor device according to claim 103, wherein said semiconductor device is an EL display device.

108.(New) The semiconductor device according to claim 103, wherein said semiconductor device is at least one selected from the group consisting of a video camera, a digital camera, a projector, a goggle type display, a car navigation system, a mobile computer, a personal computer, and a portable information terminal.

109.(New) A semiconductor device comprising:
a semiconductor layer over a substrate; and
a gate electrode adjacent to said semiconductor layer with a gate insulating film interposed therebetween,
wherein said gate electrode comprises a first conductive layer comprising tungsten nitride and a second conductive layer comprising tungsten on said first conductive layer,
wherein a bottom surface of said first conductive layer is in contact with the gate insulating film,
wherein a side surface of said first conductive layer is aligned with a side surface of said second conductive layer, and
wherein said bottom surface of said first conductive layer is larger than a bottom surface of said second conductive layer.

110.(New) The semiconductor device according to claim 109, wherein said gate electrode is located over said semiconductor layer.

111.(New) The semiconductor device according to claim 109, wherein said gate electrode has an electrical resistivity of $20\ \mu\Omega\cdot\text{cm}$ or less.

112.(New) The semiconductor device according to claim 109, wherein said semiconductor device is an active matrix type liquid crystal display device.

113.(New) The semiconductor device according to claim 109, wherein said semiconductor device is an EL display device.

114.(New) The semiconductor device according to claim 109, wherein said semiconductor device is at least one selected from the group consisting of a video camera, a digital camera, a projector, a goggle type display, a car navigation system, a mobile computer, a personal computer, and a portable information terminal.